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AUTHOR Kohr, Richard L.
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ABSTRACT

A statistical analysis was conducted to examine changes across time in some school districts of Pennsylvania. Comparisons were made for grades 5, 8, and 11 during two assessment periods. The Educational Quality Assessment data provided the basis for analysis. Correlation coefficients for school mean goal scores are displayed. Changes at the three grade levels are presented in table format. The reasons for differences across time are elaborated, e.g., there were differences in classes of students in terms of ability levels and attitudes that influenced achievement. Several factors which accounted for differences in the composition of classes are delineated: differences existed in test administration conditions or procedures from one assessment to another; the number of students at each grade level assessed varied; and there were differences in instructional programs and school climate for various reasons. These differences were also observed in standardized test scores. (DWH)

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An Analysis of Changes Across Time for Schools Participating in Educational Quality Assessment During 1978-81 and 1979-81

Richard L. Kohr
Educational Quality Assessment
Pennsylvania Department of Education

November, 1982

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INTRODUCTION

Educational Quality Assessment Data is collected on a sample of Pennsylvania school districts each year. The sample for a particular year depends on which districts request assessment rather than on a strict random sampling procedure. Peculiarities arising from the volunteer nature of the sample are minimized by the large sample size and the construction of a state representative "norm sample" from a cell structure based on district wealth and size. Thus, mean scores across years may be examined for trends, but tempered with appropriate qualifications indicating that each year's sample is reasonably representative of the state, although not a probability sample.

Another approach to examining changes across times is to analyze data obtained by identical schools during two assessment periods. In the present study data were merged for 84 districts participating in the 1978 and 1981 assessments and for 54 districts involved in the 1979 and 1981 assessments.

RESULTS

The analysis for longitudinal data considered in this report are of two types. First, a correlational analysis of scores received on the two assessment occasions was conducted to evaluate the degree to which high scoring schools in 1978 (or 1979) also tended to score high in 1981. The second set of analyses dealt with changes in mean scores across two occasions, enabling one to determine whether scores were increasing, decreasing or remaining the same. In the discussion which follows, analyses of the 1978-81 data will be referred to as 78-81 and 1979-81 analyses as 79-81.

During the merging of data for the comparison years it was discovered that approximately ten percent of the elementary buildings had been closed. Thirty one of the elementary buildings involved in the 1978 assessment were no longer open in 1981 and seventeen elementary schools participating in the 1979 assessment were closed by 1981. Shown below is the number of schools for which EQA data was complete.

Comparison Years	Grade 5	Grade 8	Grade 11
78-81	307	109	94
79-81	160	73	66

Correlations Across Time

A summary of correlation coefficients for school mean goal scores for 78-81 data is displayed in Table 1 while comparable correlations for 79-81 are presented in Table 2. Correlations are shown for the total sample at each grade level as well as for small and large school enrollment. Within each grade level the correlations for large enrollment schools will be found to be larger, with rare exception, than correlations based on small enrollment

schools. This simply illustrates the well known statistical principle that greater stability of scores is an accompanyment of larger sample sizes.

Cognitive areas generally were found to exhibit greater stability than affective areas although some exceptions occurred.

There is a general tendency for correlations to be larger in magnitude for the 78-81 data than for 79-81. This seems surprising since the 78-81 comparison represents a three year interval as opposed to a two year interval for the 79-81 data. Greater comparability between correlations observed in the 78-81 and 79-81 assessments were observed for the large grade enrollment subgroups at both grades 5 and 8. By contrast, the grade 11 correlations were considerably higher in 78-81, even for the large enrollment schools.

Correlation coefficients for condition variables are presented in Tables 3 and 4 for the 78-81 and 79-81 data, respectively. Again, large enrollment schools tend to show greater stability although there are more exceptions to this than found in the goal scores. For characteristics such as grade enrollment, percentage of students eligible for Title I, tuition and residence correlations were very high (generally in the .80's and .90's). The percentage of white students variable correlated in the .90's for 78-81 but was considerable lower for the 79-81 sample. Teacher perception variables display total sample correlations in the .50's to .70's in 78-81 and the .40's to .60's in 79-81, with teacher relationships consistently demonstrating the highest or nearly highest correlation. The least stable condition variable was percent girls which fluctuated in an essentially random way as one would expect. Home climate, homework and student perception of teacher expectations were among the other condition variables revealing relatively low stability across time.

The generally larger correlations found in the 78-81 comparison group is probably due to greater variability observed for the majority of variables. For example, looking at the total sample standard deviations for the 1981 data in both the 78-81 and 79-81 comparison groups (Tables 5, 8, 11, 14, 17 and 20), one may detect larger values for most goal areas and condition variables descriptive of the school and community (e.g., tuition, enrollment, parental education and occupation, etc.). Especially at the high school level, there is a distinct advantage for the 78-81 comparison group in terms of larger grade enrollment, which tends to enhance stability. This larger enrollment is also a clue to some other ways the two comparison groups differ. The pattern of mean score differences suggest the 78-81 group is more suburban, with a lower percentage of white students, higher parental education and occupation, higher tuition and generally more positive teacher perceptions than the more rural 79-81 group.

Changes in Mean Scores Across Time

Changes in mean scores are displayed in Tables 5 to 22. There are six tables per grade level. Total sample results are shown for both comparison groups. In addition, results are broken down for large and small enrollment schools. Statistics presented include means and standard deviations for the two assessment occations with significant differences evaluated by a dependent t test. Cohen's (1969) d index, representing an estimate of "effect size" in the case of dependent means is also presented.

Grade 5 Changes

Tables 5, 6, and 7 show the 78-81 changes in mean scores for goal areas and condition variables for grade 5 for the total sample and for small and large school enrollments. These tables revealed that all cognitive goal areas showed a significant increase with similiar sized differences within the small and large school enrollment subgroups. Grade 5 changes in mean scores for 79-81 are exhibited in Tables 14, 15, and 16. Here, the cognitive areas with significant increases were reading, writing skills, knowledge of law and government, health and information usage. Knowledge of law and government and health also demonstrated significant increases for large and small enrollment schools. None of the areas revealed significant decreases. To summarize, there is a general tendency for increases to occur in the cognitive areas with the greatest consistency in the area of reading, writing skills, knowledge of law and government, health knowledge and information usage when considering both the 78-81 and 79-81 findings.

None of the affective areas displayed significant changes for both comparison groups. Only understanding others and appreciating human accomplishments showed a significant increase, and that occurred only in the 78-81 analysis.

Some condition variables were consistent in displaying significant changes in both the 78-81 and the 79-81 comparison groups. First, small increases were found for grade enrollment in the total sample and for both the small and large enrollment subgroups. While this finding seems to run counter to the national trend of declining enrollments it is probably due to the closing of a number of elementary buildings, resulting in an increased enrollment in the remaining schools. An increase was also observed for percentage of Title I students, tuition, teacher educational level, teacher experience, percentage of white students, and parental education. There was a tendency for class size to show a small but significant decrease along with decreases in family size and the amount of television viewing. Several teacher perception variables showed a score increase which represents a general reduction in preceived problems. One could describe the results as improved teacher relationships, greater influence in instructional decisions and more activities external to the classroom available to students.

Several variables showed a change for only one comparison group such an increase in homework in 79-81 and a slight increase in parental occupation level for the 78-81 group.

Grade 8 Changes

Changes found in the analyses of grade 8 data are summarized in Tables 8 to 10 for 78-81 and Tables 17 to 19 for 79-81. Again it may be observed that no decreases occured in any of the goal areas. Significant increases in both 78-81 and 79-81 were found for writing skills, knowledge of law and government and career awareness. Mathematics and information usage showed an increase for only one group (79-81). The only affective area to show a significant increase was societal responsibility in 79-81. The general finding was that affective areas showed no significant change.

Among the changes in condition variables reflecting the national trend was a decrease in grade enrollment, average class size and family size in both 78-81 and 79-81 data. Television viewing showed a significant decrease for only the 78-81 data. Variables showing an increase include percentage of Title I students, tuition, teacher educational level, teacher experience and teacher perception of relationships. Significant increases were also observed for parental expectation and students own educational expectations which were also observed in several of the grade enrollment subgroup analyses.

Grade 11 Changes

The analysis of changes for grade 11 is summarized in Tables 11 to 13 for 78-81 and Tables 20-22 for 79-81. In contrast to grades 5 and 8, significant changes for cognitive areas failed to materialize at grade 11. A contributing factor is the smaller sample size, particularly for the 79-81 data. Significant differences appeared for several affective areas, but for 78-81 only. Interest in school and learning demonstrated an increase whereas societal responsibility, health behavior and appreciating human accomplishments revealed a decrease in scores.

Condition variable changes that were present in both the 78-81 and 79-81 total group analysis include a decrease in class size and increases in percentage of Title I students, tuition, teacher educational level, parental education level, student occupation expected, parental expectations and the student's own educational expectation. Other significant differences, appearing for just the 78-81 data, included significant decreases in grade enrollment, television viewing, amount of reading material in the home and family size. Increases occured for student perception of parental interest in school, amount of homework, student perception of teacher expectations and student desired occupation. Teacher perception became more positive with respect to satisfaction with parents, activities external to the classroom, relationship with students and parents, influence in instructional decisions and fewer classroom disruptions and discipline problems.

DISCUSSION

A Consideration of Score Changes Across Years

The following reasons for differences across time are not unique to EQA but also apply to differences observed in standardized test scores.

1. True differences in classes of students in terms of ability levels and attitudes that influence achievement.

2. Differences in composition of the class due to:

   . Building openings or closing with resultant redistribution of students.

   . Changes in attendance areas busing patterns with resultant redistribution of students.

- Change in building structure, such as K-5 changes to K-6 or a 7-9 building shifted to 6-8.

- Population shifts such as PCTTILI/occupation/education level of families moving in/out of the attendance area.

- Inclusion/exclusion of special education or vo-tech students from one assessment to another.

- Large changes in the percentage of girls in small enrollment schools.

3. Differences in test administration conditions or procedures from one assessment to another, such as:

   - Large group administration vs. individual classroom administration.

   - Directions given over PA system vs. by teachers when administered in individual classrooms.

   - Presence/absence of monitors, principal, superintendent.

   - Time of day.

   - Local events which might influence testing climate; for example, pep rallies, strikes, sudden rises in local unemployment.

4. number of students in the grade assessed (greater stability occurs with a larger number of students).

5. Differences in instructional program such as:

   - Change in instructional program.

   - Changes in teaching staff from year to year or even within a year resulting in a change in instructional emphasis and grading practices.

6. Differences in school climate due to:

   - Changes in teaching staff which can alter the communication style and expectation level to which students are exposed with a resultant effect on achievement and attitudes.

   - Change in building principal; this frequently results in a different school climate which in turn influences teacher interaction patterns with students.

REFERENCE

Cohen, J. Statistical Power Analysis for the Behavioral Sciences. New York: Academic Press, 1969.

Table 1

Summary of Correlation Coefficients for School Mean Coal Scores Obtained During tne 1978 and 1981 Assessments

	Grade 5			Grade 8			Grade 11		
Cognitive	Total Sample (n=307)	GRENROLL Up to 60 (n=158)	GRENROLL 61+ (n=149)	Total Sample (n=109)	GRENROLL Up to 200 (n=46)	GRENROLL 201+ (n=63)	Total Sample (n=94)	GRENROLL Up to 200 (n=41)	GRENROLL 201+ (n=53)
Reading Comp.	.58	.39	.74	.67	.62	.70	.61	.37	.75
Writing Skills	.57	.38	.75	.76	.68	.81	.67	.36	.83
Mathematics	.58	.52	.64	.78	.73	.81	.78	.53	.89
Know. Law/Govt.	.48	.42	.56	.66	.51	.76	.74	.58	.82
Health Knowledge	.49	.34	.66	NA	NA	NA	NA	NA	NA
Career Awareness	.50	.30	.73	.79	.83	.76	.83	.80	.87
Know. Hum. Accomp.	.54	.43	.64	.71	.58	.79	.74	.56	.82
Information Usage	.49	.32	.68	.62	.51	.69	.60	.38	.71
Affective									
Self Esteem	.31	.24	.42	.44	.37	.52	.40	.34	.43
Understanding Others	.31	.20	.50	.48	.33	.60	.40	.05	.64
Int. Schol./Learning	.29	.31	.24	.47	.39	.54	.46	.34	.51
Societal Respon.	.20	.19	.18	.56	.52	.54	.54	.45	.62
Health Behav.	NA	NA	NA	.32	.16	.45	.58	.39	.71
Creative Arts	.30	.26	.35	.50	.30	.50	.71	.61	.76
Apprec. Hum. Accomp.	.22	.19	.28	.58	.53	.56	.50	.40	.59

Table 2

Summary of Correlation Coefficients for School Mean Goal Scores Obtained During the 1979 and 1981 Assessments

	Grade 5			Grade 8			Grade 11		
Cognitive	Total Sample (n=160)	GRENROLL Up to 60 (n=91)	GRENROLL 61+ (n=69)	Total Sample (n=73)	GRENROLL Up to 200 (n=50)	GRENROLL 201+ (n=23)	Total Sample (n=66)	GRENROLL Up to 200 (n=43)	GRENROLL 201+ (n=23)
Reading Comp.	.35	.18	.69	.40	.38	.52	.32	.36	.24
Writing Skills	.49	.36	.71	.43	.32	.75	.48	.42	.59
Mathematics	.47	.32	.69	.63	.56	.80	.54	.49	.65
Know. Law/Govmt.	.45	.36	.68	.60	.61	.56	.29	.19	.28
Health Knowledge	.31	.23	.54	NA	NA	NA	NA	NA	NA
Career Awareness	.43	.32	.66	.41	.28	.78	.43	.37	.47
Know. Hum. Accomp.	.61	.51	.76	.66	.61	.84	.53	.38	.65
Information Usage	.33	.13	.65	.42	.40	.51	.18	.02	.49
Affective									
Self Esteem	.22	.09	.48	.27	.18	.60	.30	.20	.55
Understand. Others	.37	.33	.47	.50	.47	.61	.20	.24	.08
Int. Schol/Learning	.11	.08	.19	.49	.39	.76	.29	.23	.44
Societal Repon.	.24	.26	.15	.67	.63	.71	.36	.33	.43
Health Behav.	NA	NA	NA	.33	.26	.52	.40	.28	.59
Creative Activ.	.42	.36	.52	.38	.38	.32	.53	.52	.59
Apprec. Hum. Accomp.	.21	.24	.08	.52	.49	.53	.42	.43	.39

Table 3

Summary of Correlation Coefficients for School Mean Goal Scores Obtained During the 1978 and 1981 Assessments

Cognitive	Grade 5 Total Sample (n=307)	Grade 5 GRENROLL Up to 60 (n=158)	Grade 5 GRENROLL 61+ (n=149)	Grade 8 Total Sample (n=109)	Grade 8 GRENROLL Up to 200 (n=46)	Grade 8 GRENROLL 201+ (n=63)	Grade 11 Total Sample (n=94)	Grade 11 GRENROLL Up to 200 (n=41)	Grade 11 GRENROLL 201+ (n=53)
GRENROLL	.93	.77	.89	.93	.82	.90	.93	.91	.98
PCTTITLI	.89	.85	.91	.92	.90	.94	.85	.70	.95
TUITION	.94	.94	.94	.94	.91	.95	.93	.90	.94
TLOCALE	.70	.64	.79	.85	.88	.80	.89	.89	.88
TSATPAR	.62	.52	.73	.70	.64	.71	.68	.67	.73
TEDUC	.65	.65	.64	.80	.69	.83	.86	.72	.88
TEXPER	.65	.62	.73	.67	.61	.70	.78	.77	.80
CLSIZE	.51	.48	.46	.66	.51	.72	.68	.63	.70
EXTRACT	.61	.53	.70	.62	.61	.57	.73	.78	.68
TRELATE	.75	.71	.80	.79	.66	.82	.76	.75	.79
DISRUPT	.59	.44	.74	.71	.66	.73	.61	.60	.63
INFLUENC	.56	.46	.66	.66	.69	.61	.70	.78	.64
TSTAFF	.57	.51	.64	.56	.53	.56	.64	.61	.66
DISCPROB	.66	.63	.69	.61	.49	.68	.50	.36	.64
PAREDUC	.87	.85	.89	.92	.83	.96	.95	.88	.98
PAROCC	.86	.81	.89	.93	.89	.93	.91	.75	.96
OCDESIRE	NA	NA	NA	NA	NA	NA	.88	.85	.89
OCEXPECT	NA	NA	NA	NA	NA	NA	.91	.86	.92
PCTGIRLS	.00	-.03	.10	-.02	-.13	.21	.14	.13	.09
RESIDE	.89	.85	.92	.91	.87	.93	.94	.86	.96
PCTWHITE	.91	.72	.95	.94	.94	.96	.97	.94	.98
LIBRARY	.56	.52	.63	.57	.40	.75	.62	.62	.61
STABLE	.41	.26	.56	.61	.63	.52	.50	.16	.57
FAMSIZE	.65	.54	.78	.80	.73	.85	.82	.73	.88
FAMORDER	.27	.12	.54	.51	.40	.59	.61	.55	.69
SPARINT	.34	.27	.47	.71	.61	.77	.44	.33	.54
HOMEWORK	.24	.22	.28	.56	.49	.62	.71	.58	.77
TVWATCH	.52	.36	.67	.74	.64	.78	.70	.49	.82
PAREXP	NA	NA	NA	.86	.78	.90	.88	.79	.93
EDEXPECT	NA	NA	NA	.90	.85	.92	.93	.86	.95
STEACHEX	NA	NA	NA	.55	.43	.69	.49	.44	.55
HOMEREAD	.69	.57	.80	.84	.74	.90	.80	.66	.89
HOMECLIM	.10	.01	.21	.37	.40	.38	.25	.19	.35

Table 4

Summary of Correlation Coefficients for School Mean Goal Scores Obtained During the 1979 and 1981 Assessments

Cognitive	Grade 5 Total Sample (n=160)	Grade 5 GRENROLL Up to 60 (n=91)	Grade 5 GRENROLL 61+ (n=69)	Grade 8 Total Sample (n=73)	Grade 8 GRENROLL Up to 200 (n=50)	Grade 8 GRENROLL 201+ (n=23)	Grade 11 Total Sample (n=66)	Grade 11 GRENROLL Up to 200 (n=43)	Grade 11 GRENROLL 201+ (n=23)
GRENROLL	.92	.72	.88	.98	.95	.86	.98	.93	.95
PCTTITLI	.91	.91	.93	.83	.79	.89	.86	.84	.85
TUITION	.95	.94	.95	.89	.86	.92	.89	.88	.91
TLOCALE	.78	.76	.83	.87	.88	.86	.93	.92	.96
TSATPAR	.49	.38	.74	.48	.45	.56	.57	.61	.50
TEDUC	.73	.74	.72	.80	.75	.88	.87	.78	.93
TEXPER	.77	.72	.85	.72	.76	.57	.82	.84	.79
CLSIZE	.61	.57	.61	.80	.82	.68	.75	.74	.76
EXTRACT	.58	.58	.59	.67	.67	.61	.69	.62	.80
TRELATE	.69	.64	.77	.62	.54	.75	.63	.65	.63
DISRUPT	.57	.59	.52	.64	.61	.68	.64	.63	.60
INFLUENC	.62	.70	.41	.53	.55	.50	.51	.45	.67
TSTAFF	.58	.58	.54	.46	.47	.40	.52	.38	.78
DISCPROB	.63	.64	.64	.41	.39	.49	.46	.40	.64
PAREDUC	.79	.72	.89	.90	.75	.97	.88	.74	.94
PAROCC	.80	.72	.87	.88	.78	.95	.86	.69	.96
OCDESIRE	NA	NA	NA	NA	NA	NA	.63	.47	.81
OCEXPECT	NA	NA	NA	NA	NA	NA	.77	.65	.83
PCTGIRLS	.06	.06	.12	.18	.19	.16	.28	.28	.50
RESIDE	.85	.84	.84	.87	.61	.90	.90	.73	.94
PCTWHITE	.69	.62	.79	.66	.23	.90	.44	.04	.81
LIBRARY	.53	.49	.58	.69	.67	.74	.74	.72	.73
STABLE	.47	.45	.49	.40	.28	.58	.28	.17	.50
FAMSIZE	.50	.37	.70	.73	.69	.72	.72	.61	.72
FAMORDER	.31	.19	.56	.42	.40	.33	.40	.27	.40
SPARINT	.31	.27	.38	.62	.61	.70	.39	.40	.36
HOMEWORK	.44	.42	.51	.44	.49	.35	.52	.46	.56
TVWATCH	.54	.46	.64	.62	.55	.74	.36	.21	.21
PAREXP	NA	NA	NA	.80	.76	.84	.73	.60	.87
EDEXPECT	NA	NA	NA	.82	.77	.90	.80	.72	.84
STEACHEX	NA	NA	NA	.20	.15	.39	.41	.39	.47
HOMEREAD	.61	.51	.80	.56	.33	.82	.51	.32	.79
HOMECLIM	.18	.22	.08	.37	.39	.36	.12	.08	.28

Table 5

Changes in Scores for Schools Involved in 1978 and 1981 Assessments: Grade 5 All Schools (n=307)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	61.95	3.44	62.39	3.31	1.95	0.11
Und Othr	119.19	8.55	121.75	8.23	4.55*	0.26
Reading	27.46	3.46	29.06	3.77	8.40*	0.48
Writing	28.84	2.86	30.12	2.95	8.33*	0.48
Math	37.22	3.81	38.22	3.81	5.03*	0.29
Int Schl	55.48	3.32	55.02	3.40	-2.01	0.12
Soc Resp	42.99	2.82	43.29	2.43	1.58	0.09
K Law/Gov	10.87	1.38	11.62	1.44	9.14*	0.52
Health	29.21	2.48	30.60	2.40	9.83*	0.56
Creat Act	52.52	5.75	53.04	6.01	1.29	0.07
Career Awar	24.58	2.33	25.57	2.23	7.60*	0.43
Ap Hum Acc	146.88	10.30	150.49	10.16	4.95*	0.28
K Hum Acc	28.66	3.48	22.48	3.14	-33.80[a]	1.93
Info Usage	18.68	2.48	19.66	2.40	7.03*	0.40
GRENROLL	64.76	42.02	66.97	42.11	2.50*	0.14
PCTTITLI	16.66	13.07	18.10	13.65	3.99*	0.23
TUITION	1070.33	176.82	1409.84	260.39	53.05*	3.03
TLOCALE	1.37	0.31	1.38	0.30	0.98	0.06
TSATPAR	2.28	0.36	2.28	0.35	0.51	0.03
TEDUC	1.55	0.27	1.64	0.28	6.57*	0.38
TEXPER	10.99	3.01	12.22	2.88	8.73*	0.50
CLSIZE	24.72	2.41	23.78	2.62	-6.55*	0.37
EXTRACT	11.59	1.19	12.05	1.21	7.63*	0.44
TRELATE	18.91	3.10	19.64	3.13	5.82*	0.33
DISRUPT	19.94	1.53	20.22	1.50	3.66*	0.21
INFLUENC	19.52	2.51	20.60	2.40	8.22*	0.47
TSTAFF	7.88	0.82	7.97	0.80	2.19	0.13
DISCROB	10.89	1.88	11.22	1.80	3.81*	0.22
PAREDUC	3.63	0.65	3.79	0.64	8.95*	0.51
PAROCC	56.59	12.71	57.72	12.41	2.95*	0.17
PCTGIRLS	48.73	8.03	49.29	8.68	0.84	0.05
RESIDE	1.88	1.89	1.87	1.86	0.02	0.00
PCTWHITE	90.35	12.28	93.57	13.12	10.33*	0.59
LIBRARY	1.77	0.53	1.77	0.55	0.05	0.00
STABLE	3.61	0.19	3.63	0.17	1.81	0.10
FAMSIZE	2.49	0.46	2.20	0.42	-13.61*	0.78
FAMORDER	1.11	0.15	1.17	0.13	6.89*	0.39
SPARINT	6.28	0.54	6.26	0.49	-0.43	0.02
HOMEWORK	1.92	0.26	1.93	0.28	0.43	0.02
TVWATCH	2.44	0.38	2.27	0.38	-8.15*	0.47
HOMEREAD	10.96	0.92	10.95	0.92	-0.27	0.02
HOMECLIM	25.34	1.24	25.29	1.10	-0.59	0.03

[a]Difference for Knowledge of Human Accomplishments due to scoring change

*Denotes significance beyond .01 level determined by dependent t test

Table 6

Changes in Scores for Schools Involved in 1978 and 1981 Assessments: Grade 5 Small Grade Enrollment: Up to 60 (n=158)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	61.62	3.73	62.27	3.62	1.81	0.14
Und Othr	119.03	9.22	122.42	9.15	3.66*	0.29
Reading	27.43	3.19	29.23	3.67	5.90*	0.47
Writing	28.57	2.76	30.06	2.86	5.96*	0.47
Math	37.27	3 69	38.27	3.77	3.45*	0.28
Int Schl	55.52	3.82	55.03	3.76	-1.36	0.11
Soc Resp	43.06	3.38	43.65	2.68	1.88	0.15
K Law/Gov	10.77	1.36	11.75	1.46	8.01*	0.64
Health	29.12	2.49	30.68	2.50	6.80*	0.54
Creat Act	51.87	6.73	52.64	6.65	1.19	0.09
Career Awar	24.46	2.34	25.63	2.29	5.38*	0.43
Ap Hum Acc	147.14	11.89	151.19	11.66	3.39*	0.27
K Hum Acc	28.11	3.58	22.18	3.05	-20.82[a]	1.66
Info Usage	18.54	2.41	19.70	2.49	5.10*	0.41
GRENROLL	36.54	14.29	39.12	16.49	3.06*	0.24
PCTTITLI	17.06	11.41	18.63	12.13	3.05*	0.24
TUITION	1040.60	152.69	1355.05	225.69	40.23*	3.20
TLOCALE	1.38	0.34	1.40	0.31	0.83	0.07
TSATPAR	2.27	0.37	2.29	0.34	0.40	0.03
TEDUC	1.54	0.31	1.61	0.30	3.28*	0.26
TEXPER	10.90	3.48	11.92	3.08	4.40*	0.35
CLSIZE	24.16	2.48	23.15	2.81	-4.70*	0.37
READTIME	9.93	2.66	5.59	1.11	-19.89*	1.58
MATHTIME	6.89	3.49	4.14	0.57	-9.84*	0.78
EXTRACT	11.58	1.18	12.07	1.28	5.23*	0.42
TRELATE	18.94	3.07	19.80	3.13	4.55*	0.36
DISRUPT	20.06	1.49	20.42	1.45	2.90*	0.23
INFLUENC	19.55	2.43	20.78	2.27	6.28*	0.50
TSTAFF	7.97	0.86	8.06	0.81	1.32	0.11
DISCPROB	11.10	1.86	11.40	1.77	2.33	0.19
PAREDUC	3.53	0.59	3.66	0.58	5.28*	0.42
PAROCC	54.42	11.99	55.06	11.44	1.13	0.09
PCTGIRLS	48.68	9.50	49.48	10.35	0.72	0.06
RESIDE	1.54	1.78	1.53	1.77	-0.14	0.01
PCTWHITE	92.13	7.18	96.03	7.66	8.78*	0.70
LIBRARY	1.75	0.57	1.74	0.60	-0.04	0.00
STABLE	3.64	0.17	3.65	0.19	0.78	0.06
FAMSIZE	2.51	0.46	2.20	0.44	-8.84*	0.70
FAMORDER	1.10	0.16	1.17	0.14	4.24*	0.34
SPARINT	6.26	0.62	6.22	0.53	-0.71	0.06
HOMEWORK	1.89	0.31	1.89	0.33	-0.23	0.02
TVWATCH	2.47	0.38	2.32	0.36	-4.47*	0.36
HOMEREAD	10.87	0.91	10.87	0.88	0.00	0.00
HOMECLIM	25.25	1.41	25.21	1.22	-0.31	0.02

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 7

Changes in Scores for Schools Involved in
1978 and 1981 Assessments: Grade 5
Large Grade Enrollment: 61+ (n=149)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	62.28	3.07	62.50	2.95	0.80	0.07
Und Othr	119.35	7.82	121.03	7.09	2.15*	0.22
Reading	27.48	3.71	28.88	3.86	6.23*	0.51
Writing	29.11	2.91	30.17	3.02	6.14*	0.56
Math	37.16	3.93	38.17	3.85	3.68*	0.30
Int Schl	55.44	2.66	55.00	2.95	-1.53	0.13
Soc Resp	42.91	2.05	42.91	2.05	0.01	0.00
K Law/Gov	10.97	1.39	11.49	1.41	4.81*	0.39
Health	29.31	2.46	30.51	2.27	7.57*	0.62
Creat Act	53.21	4.38	53.45	5.22	0.53	0.04
Career Awar	24.70	2.30	25.49	2.13	5.92*	0.49
Ap Hum Acc	146.59	8.32	149.74	8.25	3.86*	0.32
K Hum Acc	29.24	3.25	22.80	3.20	-28.74[a]	2.35
Info Usage	18.81	2.56	19.62	2.31	5.04*	0.41
GRENROLL	94.69	41.02	96.49	40.88	1.13	0.09
PCTTITLI	16.22	14.64	17.55	15.11	2.56	0.21
TUITION	1101.85	195.02	1467.94	282.22	37.29*	3.06
TLOCALE	1.34	0.27	1.35	0.27	0.52	0.04
TSATPAR	2.27	0.35	2.28	0.34	0.30	0.02
TEDUC	1.56	0.22	1.66	0.25	6.53*	0.54
TEXPER	11.08	2.41	12.53	2.63	9.47*	0.78
CLSIZE	25.31	2.18	24.45	2.19	-4.60*	0.38
READTIME	9.83	2.27	5.58	1.18	-21.01*	1.72
MATHTIME	6.90	2.43	4.14	0.49	-13.61*	1.12
EXTRACT	11.59	1.21	12.02	1.13	5.73*	0.47
TRELATE	18.87	3.13	19.46	3.13	3.63*	0.30
DISRUPT	19.80	1.55	20.00	1.50	2.24	0.18
INFLUENC	19.48	2.60	20.40	2.50	5.30*	0.43
TSTAFF	7.76	0.77	7.86	0.76	1.86	0.15
DISCPROB	10.65	1.87	11.02	1.82	3.09*	0.25
PAREDUC	3.72	0.70	3.92	0.68	7.44*	0.61
PAROCC	58.90	13.08	60.54	12.79	3.25*	0.27
PCTGIRLS	48.77	6.12	49.09	6.46	0.46	0.04
RESIDE	2.22	1.93	2.24	1.89	0.21	0.02
PCTWHITE	88.46	15.81	90.96	16.75	5.81*	0.48
LIBRARY	1.79	0.49	1.79	0.47	0.15	0.01
STABLE	3.57	0.19	3.60	0.14	2.01	0.17
FAMSIZE	2.40	0.45	2.19	0.38	-11.40*	0.93
FAMORDER	1.11	0.12	1.17	0.11	6.66*	0.55
SPARINT	6.28	0.44	6.29	0.44	0.32	0.03
HOMEWORK	1.94	0.20	1.97	0.22	1.21	0.10
TVWATCH	2.41	0.37	2.21	0.39	-7.79	0.64
HOMEREAD	11.05	0.91	11.02	0.95	-0.49	0.04
HOMECLIM	25.43	1.00	25.38	0.91	-0.62	0.05

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 8

Changes in Scores for Schools Involved in
1978 and 1981 Assessments: Grade 8
All Schools (n=109)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self-Esteem	58.12	2.55	58.47	2.27	1.43	0.14
Und Othr	112.25	5.46	112.96	5.47	1.33	0.13
Reading	27.17	2.88	27.36	2.52	0.90	0.09
Writing	36.55	2.77	37.23	2.74	3.68*	0.35
Math	32.00	3.49	32.47	3.30	2.15	0.21
Int Schl	67.65	4.77	68.26	4.73	1.32	0.13
Soc Resp	60.85	3.86	61.29	3.27	1.34	0.13
K Law/Gov	24.98	2.71	25.77	2.53	3.81*	0.37
Health	87.65	3.72	86.94	3.08	-1.85	0.18
Creat Act	46.19	5.03	46.41	4.58	0.46	0.04
Career Awar	23.07	2.09	23.89	1.85	6.54*	0.63
Ap Hum Acc	132.51	8.50	131.72	8.89	-1.03	0.10
K. Hum Acc	38.64	4.01	30.32	3.35	-30.51[a]	2.92
Infor Usage	14.91	1.63	15.17	1.48	1.99	0.19
GRENROLL	223.75	115.73	198.08	99.16	-6.28*	0.60
PCTTITLI	16.29	10.45	18.87	11.75	5.96*	0.57
TUITION	1240.54	199.30	1627.95	302.72	30.24*	2.90
TLOCALE	1.31	0.26	1.30	0.26	-0.79	0.08
TSATPAR	1.90	0.31	1.95	0.28	2.17	0.21
TEDUC	1.64	0.22	1.70	0.24	4.26*	0.40
TEXPER	11.20	1.97	12.37	1.98	7.54*	0.72
CLSIZE	25.72	2.21	23.95	2.23	-10.12*	0.97
EXTRACT	10.58	1.13	10.93	1.15	3.69*	0.35
TRELATE	14.46	2.68	15.38	2.71	5.52*	0.53
DISRUPT	18.32	1.56	18.78	1.43	4.17*	0.40
INFLUENC	18.90	1.98	19.79	2.11	5.51*	0.53
TSTAFF	7.21	0.68	7.41	0.66	3.29*	0.32
DISCPROB	8.81	1.86	9.60	1.79	5.12*	0.49
PAREDUC	3.60	0.54	3.71	0.57	5.17*	0.50
PAROCC	58.73	9.20	59.45	9.87	2.05*	0.20
PCTGIRLS	49.04	4.52	48.97	4.61	-0.11*	0.01
RESIDE	1.77	1.67	1.72	1.61	-0.85	0.08
PCTWHITE	92.00	11.04	92.69	10.81	1.91	0.18
LIBRARY	1.91	0.44	1.92	0.41	0.42	0.04
STABLE	3.67	0.13	3.66	0.12	-0.33	0.03
FAMSIZE	2.93	0.40	2.63	0.37	-12.91*	1.24
FAMORDER	1.00	0.09	1.09	0.10	10.32*	0.99
SPARINT	5.30	0.53	5.47	0.46	4.84*	0.46
HOMEWORK	1.73	0.20	1.84	0.22	6.07*	0.58
TVWATCH	2.30	0.30	2.14	0.33	-7.34*	0.70
PAREXP	4.76	0.45	4.92	0.47	6.80*	0.65
EDEXPECT	2.13	0.34	2.25	0.33	8.70*	0.83
STEACHEX	1.66	0.13	1.72	0.12	4.62*	0.44
HOMEREAD	11.59	0.62	11.53	0.58	-1.79	0.17
HOMECLIM	23.84	1.10	24.15	0.94	2.78*	0.27

[a]Difference for Knowledge of Human Accomplishments due to Scoring Change

*Denotes significance beyond .01 level determined by dependent t test

Table 9

Changes in Scores for Schools Involved in 1978 and 1981 Assessments: Grade 8
Small Grade Enrollment: Up to 200 (n=46)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.84	2.84	58.16	2.76	0.68	0.10
Und Othr	112.12	5.38	112.82	5.58	0.75	0.11
Reading	27.14	2.60	26.98	2.45	-0.48	0.07
Writing	36.36	2.42	36.63	2.57	0.89	0.13
Math	32.01	3.17	32.20	3.17	0.55	0.08
Int Schl	67.29	4.97	68.21	4.93	1.14	0.17
Soc Resp	62.15	4.42	62.22	3.45	0.10	0.02
K Law/Gov	24.81	2.52	25.75	2.60	2.52	0.37
Health	88.41	4.40	87.36	3.23	-1.42	0.21
Creat Act	43.56	5.01	44.44	4.29	1.08	0.16
Career Awar	22.89	2.16	23.85	2.16	5.10*	0.75
Ap Hum Acc	135.25	9.27	134.86	9.26	-0.29	0.04
K Hum Acc	38.43	3.73	30.04	3.12	-17.92[a]	2.65
Info Usage	14.70	1.44	15.01	1.52	1.42	0.21
GRENROLL	131.58	44.23	124.32	52.47	-1.61	0.24
PCTTITLI	19.44	10.77	22.35	12.59	3.52*	0.52
TUITION	1206.78	164.59	1556.89	266.46	17.73*	2.62
TLOCALE	1.35	0.30	1.34	0.29	-0.53	0.08
TSATPAR	1.81	0.28	1.83	0.26	0.43	0.06
TEDUC	1.56	0.20	1.59	0.19	1.41	0.21
TEXPER	11.39	1.87	12.53	1.92	4.58*	0.68
CLSIZE	24.81	2.11	23.24	2.25	-4.93*	0.73
EXTRACT	10.18	1.16	10.47	1.02	2.03	0.30
TRELATE	13.36	2.40	14.22	2.38	2.94*	0.43
DISRUPT	17.95	1.61	18.39	1.57	2.27	0.34
INFLUENC	18.57	2.22	19.42	2.21	3.29*	0.49
TSTAFF	7.08	0.64	7.26	0.69	1.88	0.28
DISCPROB	8.59	1.75	9.38	1.76	3.01*	0.44
PAREDUC	3.42	0.47	3.51	0.43	2.19	0.32
PAROCC	54.49	8.24	54.81	8.49	0.53	0.08
PCTGIRLS	48.90	5.75	48.77	5.97	-0.11	0.02
RESIDE	1.26	1.47	1.10	1.21	-1.54	0.23
PCTWHITE	91.93	11.59	93.91	10.76	3.29*	0.49
LIBRARY	1.98	0.38	1.97	0.48	-0.07	0.01
STABLE	3.72	0.11	3.70	0.12	-0.75	0.11
FAMSIZE	3.00	0.41	2.70	0.35	-7.20*	1.06
FAMORDER	0.98	0.10	1.08	0.09	6.17*	0.91
SPARINT	5.21	0.53	5.39	0.43	2.85*	0.42
HOMEWORK	1.73	0.20	1.83	0.22	3.25*	0.48
TVWATCH	2.36	0.27	2.23	0.31	-3.54*	0.52
PAREXP	4.67	0.40	4.81	0.46	3.18*	0.47
EDEXPECT	2.02	0.30	2.15	0.31	5.12*	0.76
STEACHEX	1.65	0.14	1.70	0.14	2.11	0.31
HOMEREAD	11.38	0.61	11.37	0.52	-0.12	0.02
HOMECLIM	23.78	1.32	24.40	1.10	3.11*	0.46

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyong .01 level determined by dependent t test.

Table 10

Changes in Scores for Schools Involved in 1978 and 1981 Assessments: Grade 8 Large Grade Enrollment: 201+ (n=63)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	58.31	2.29	58.68	1.78	1.45	0.18
Und Othr	112.34	5.53	113.06	5.43	1.15	0.15
Reading	27.19	3.08	27.63	2.56	1.59	0.20
Writing	36.69	3.01	37.66	2.79	4.31*	0.54
Math	32.00	3.74	32.66	3.41	2.40	0.30
Int Schl	67.90	4.63	68.30	4.59	0.70	0.09
Soc Resp	59.89	3.05	60.60	2.95	1.94	0.25
K Law/Gov	25.09	2.85	25.77	2.49	2.89*	0.36
Health	87.09	3.00	86.63	2.90	-1.18	0.15
Creat Act	48.12	4.10	47.84	4.25	-0.52	0.07
Career Awar	23.20	2.03	23.91	1.60	4.26*	0.54
Ap Hum Acc	130.50	7.35	129.42	7.92	-1.19	0.15
K Hum Acc	38.50	4.23	30.51	3.51	-25.14[a]	3.17
Info Usage	15.06	1.75	15.28	1.44	1.38	0.17
GRENROLL	291.04	104.91	251.93	90.24	-6.82*	0.86
PCTTITLI	13.98	9.65	16.31	10.47	5.25*	0.66
TUITION	1265.19	219.23	1679.84	318.78	25.71*	3.24
TLOCALE	1.28	0.20	1.26	0.22	-0.58	0.07
TSATPAR	1.96	0.31	2.03	0.26	2.53	0.32
TEDUC	1.70	0.22	1.77	0.24	4.53*	0.57
TEXPER	11.06	2.04	12.24	2.02	5.99*	0.75
CLSIZE	26.37	2.04	24.46	2.07	-9.88*	1.25
EXTRACT	10.87	1.02	11.26	1.12	3.08*	0.39
TRELATE	15.25	2.59	16.22	2.64	4.90*	0.62
DISRUPT	18.58	1.46	19.05	1.26	3.67*	0.46
INFLUENC	19.13	1.76	20.06	2.00	4.41*	0.56
TSTAFF	7.31	0.68	7.52	0.62	2.71*	0.34
DISCPROB	8.96	1.93	9.75	1.81	4.19*	0.53
PAREDUC	3.73	0.56	3.85	0.61	5.64*	0.71
PAROCC	61.81	8.64	62.84	9.46	2.35	0.30
PCTGIRLS	49.13	3.39	49.11	3.31	-0.05	0.01
RESIDE	2.14	1.71	2.16	1.71	0.30	0.04
PCTWHITE	92.05	10.69	91.78	10.83	-0.67	0.09
LIBRARY	1.85	0.47	1.88	0.33	0.78	0.10
STABLE	3.63	0.12	3.63	0.11	0.13	0.02
FAMSIZE	2.87	0.37	2.58	0.37	-11.46*	1.44
FAMORDER	1.01	0.08	1.10	0.09	8.52*	1.07
SPARINT	5.35	0.52	5.52	0.47	4.01*	0.51
HOMEWORK	1.72	0.21	1.84	0.21	5.29*	0.67
TVWATCH	2.25	0.30	2.07	0.32	-6.94*	0.88
PAREXP	4.82	0.46	5.00	0.45	6.88*	0.87
ECEXPECT	2.20	0.35	2.32	0.33	7.20*	0.91
STEACHEX	1.67	0.11	1.72	0.11	5.00*	0.63
HOMEREAD	11.74	0.57	11.65	0.59	-2.85*	0.36
HOMECLIM	23.88	0.92	23.96	0.75	0.70	0.09

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 11

Changes in Scores for Schools Involved in 1978 and 1981 Assessments: Grade 11 All Schools (n=94)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self-Esteem	58.87	1.91	59.35	2.32	1.98	0.20
Und Othr	115.07	5.73	114.26	5.13	-1.91	0.14
Reading	25.41	2.99	25.12	2.67	-1.12	0.12
Writing	34.66	3.09	34.75	2.60	0.36	0.04
Math	35.39	3.06	34.97	2.78	-2.06	0.21
Int Schl	63.11	4.77	64.40	4.08	2.70*	0.28
Soc Resp	51.18	2.58	50.53	2.03	-2.80*	0.29
K Law/Gov	24.61	2.56	24.63	2.48	0.14	0.01
Health	81.71	3.99	80.68	3.79	-2.82*	0.29
Creat Act	42.00	4.35	42.00	5.38	-0.02	0.00
Career Awar	22.80	2.13	23.00	1.94	1.58	0.16
Ap Hum Acc	133.02	7.10	128.67	8.84	-5.21*	0.54
K Hum Acc	40.12	3.96	26.73	3.10	-48.46[a]	5.00
Info Usage	18.05	1.90	17.92	1.69	-0.77	0.08
GRENROLL	264.90	176.75	247.03	156.91	-5.27*	0.54
PCTTITLI	14.43	10.26	16.07	10.98	2.71*	0.28
TUITION	1233.01	194.89	1614.49	289.98	28.37*	2.93
TLOCALE	1.29	0.28	1.27	0.27	-1.72	0.18
TSATPAR	1.82	0.28	1.89	0.27	2.81*	0.29
TEDUC	1.72	0.24	1.77	0.25	4.00*	0.41
TEXPER	12.33	1.95	13.63	1.93	9.76*	1.01
CLSIZE	24.63	1.71	23.49	1.94	-7.39*	0.76
EXTRACT	10.48	1.01	10.75	1.02	3.45*	0.36
TRELATE	13.48	2.38	14.43	2.52	5.40*	0.56
DISRUPT	17.26	1.29	17.68	1.33	3.50*	0.36
INFLUENC	18.84	1.98	19.59	1.99	4.71*	0.49
TSTAFF	6.87	0.68	7.00	0.70	2.24	0.23
DISCPROB	8.73	1.57	9.43	1.67	4.23*	0.44
PAREDUC	3.63	0.48	3.71	0.49	5.03*	0.52
PAROCC	59.67	8.58	60.21	8.94	1.39	0.14
OCDESIRE	66.66	5.41	67.63	5.42	3.58*	0.37
OCEXPECT	60.85	7.56	63.04	7.19	6.66*	0.69
PCTGIRLS	50.82	4.45	50.68	4.48	-0.22	0.02
RESIDE	1.68	1.53	1.65	1.48	-0.57	0.06
PCTWHITE	91.23	12.76	91.50	14.17	0.70	0.07
LIBRARY	2.02	0.40	2.00	0.31	-0.48	0.05
STABLE	3.78	0.10	3.79	0.08	1.00	0.10
FAMSIZE	3.04	0.37	2.86	0.37	-7.62*	0.79
FAMORDER	1.03	0.09	1.01	0.11	-0.81	0.08
SPARINT	5.11	0.48	5.26	0.47	2.92*	0.30
HOMEWORK	1.69	0.21	1.74	0.22	3.48*	0.36
TVWATCH	1.56	0.23	1.48	0.27	-3.74*	0.39
PAREXP	4.82	0.40	4.92	0.45	4.54*	0.47
EDEXPECT	2.13	0.31	2.22	0.31	7.56*	0.78
STEACHEX	1.67	0.12	1.71	0.12	3.42*	0.35
HOMEREAD	11.78	0.46	11.64	0.45	-4.42*	0.46
HOMECLIM	23.35	0.93	23.59	0.92	2.03	0.21

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 12

Changes in Scores for Schools Involved in
1978 and 1981 Assessments: Grade 11
Small Grade Enrollment: Up to 200 (n=41)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	58.44	1.90	58.96	2.63	1.24	0.19
Und Othr	115.23	5.44	115.64	4.85	0.37	0.06
Reading	25.20	2.94	25.11	2.32	-0.20	0.03
Writing	34.32	2.79	34.43	2.30	0.24	0.04
Math	35.08	2.69	34.79	2.34	-0.73	0.12
Int Schl	62.07	4.78	63.82	3.52	2.29	0.36
Soc Resp	51.35	2.61	51.04	2.05	-0.77	0.12
K Law/Gov	24.16	2.41	24.23	2.23	0.22	0.03
Health	82.14	3.89	80.77	3.57	-2.12	0.33
Creat Act	40.33	3.85	39.55	5.93	-1.06	0.17
Career Awar	22.66	2.41	23.01	2.14	1.54	0.24
Ap Hum Acc	132.43	7.54	128.19	9.16	-2.93*	0.46
K Hum Acc	39.91	3.32	26.03	2.43	-31.61[a]	4.94
Info Usage	17.98	1.72	17.76	1.43	-0.76	0.12
GRENROLL	129.63	43.80	129.78	45.16	0.05	0.01
PCTTITLI	17.50	9.92	19.36	10.82	1.47	0.23
TUITION	1191.39	168.67	1536.43	242.39	18.86*	2.95
TLOCALE	1.34	0.30	1.33	0.27	-0.66	0.10
TSATPAR	1.83	0.31	1.85	0.22	0.68	0.11
TEDUC	1.59	0.19	1.63	0.20	1.73	0.27
TEXPER	12.13	1.81	13.43	2.14	6.00*	0.94
CLSIZE	24.36	1.76	23.18	1.83	-4.89*	0.76
EXTRACT	10.35	1.16	10.66	1.06	2.62*	0.41
TRELATE	13.28	2.61	14.17	2.11	3.31*	0.52
DISRUPT	17.43	1.45	18.05	1.14	3.35*	0.52
INFLUENC	18.76	2.38	19.58	2.01	3.44*	0.54
TSTAFF	6.92	0.64	7.10	0.62	2.09	0.33
DISCPROB	8.53	1.77	9.44	1.45	3.17*	0.50
PAREDUC	3.44	0.36	3.50	0.32	2.03	0.32
PAROCC	55.43	7.27	55.24	7.15	-0.24	0.04
OCDESIRE	64.64	5.02	64.76	4.49	0.27	0.04
OCEXPECT	57.53	7.33	59.69	6.84	3.61*	0.56
PCTGIRLS	49.91	5.18	49.95	5.68	0.03	0.01
RESIDE	0.97	1.20	0.89	1.02	-0.83	0.13
PCTWHITE	92.86	9.06	93.43	11.64	0.80	0.13
LIBRARY	2.06	0.36	2.10	0.30	0.96	0.15
STABLE	3.81	0.08	3.81	0.06	0.07	0.01
FAMSIZE	3.05	0.37	2.85	0.36	-4.62*	0.72
FAMORDER	1.02	0.10	1.02	0.11	-0.41	0.07
SPARINT	5.05	0.53	5.15	0.45	1.03	0.16
HOMEWORK	1.63	0.20	1.67	0.20	1.31	0.21
TVWATCH	1.62	0.20	1.57	0.27	-1.23	0.19
PAREXP	4.68	0.33	4.75	0.42	1.69	0.27
EDEXPECT	2.00	0.26	2.10	0.26	4.16*	0.65
STEACHEX	1.65	0.14	1.70	0.14	1.90	0.30
HOMEREAD	11.60	0.47	11.54	0.44	-1.01	0.16
HOMECLIM	23.33	1.09	23.67	1.07	1.59	0.25

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 13

Changes in Scores for Schools Involved in
1978 and 1981 Assessments: Grade 11
Large Grade Enrollment: 201 + (n=53)

	1978		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	59.19	1.85	59.63	2.01	1.56	0.22
Und Othr	114.93	5.96	113.18	5.10	-2.70*	0.37
Reading	25.57	3.04	25.12	2.93	-1.56	0.21
Writing	34.92	3.30	34.99	2.81	0.27	0.04
Math	35.62	3.32	35.09	3.08	-2.52	0.35
Int Schl	63.91	4.63	64.85	4.43	1.53	0.21
Soc Resp	51.04	2.57	50.12	1.91	-3.29*	0.45
K Law/Gov	24.95	2.63	24.94	2.63	-0.04	0.01
Health	81.37	4.04	80.59	3.94	-1.85	0.26
Creat Act	43.30	4.30	43.88	4.04	1.48	0.20
Career Awar	22.90	1.89	22.97	1.79	0.56	0.08
Ap Hum Acc	133.47	6.77	129.04	8.66	-4.50*	0.62
K Hum Acc	40.29	4.41	27.26	3.45	-37.37a	5.13
Info Usage	18.10	2.04	18.04	1.87	-0.31	0.04
GRENROLL	369.54	169.73	337.73	152.44	-6.64*	0.91
PCTTITLI	12.04	9.95	13.52	10.50	3.15*	0.43
TUITION	1265.20	208.85	1674.86	310.92	22.24*	3.05
TLOCALE	1.24	0.25	1.21	0.25	-1.74	0.24
TSATPAR	1.82	0.25	1.91	0.30	3.29*	0.45
TEDUC	1.80	0.23	1.87	0.24	4.03*	0.55
TEXPER	12.48	2.04	13.78	1.75	7.72*	1.06
CLSIZE	24.82	1.66	23.72	2.00	-5.49*	0.75
EXTRACT	10.58	0.87	10.81	0.99	2.27	0.31
TRELATE	13.64	2.19	14.62	2.79	4.23*	0.58
DISRUPT	17.12	1.14	17.38	1.40	1.70	0.23
INFLUENC	18.89	1.63	19.59	1.98	3.23*	0.44
TSTAFF	6.82	0.70	6.92	0.75	1.17	0.16
DISCPROB	8.88	1.38	9.43	1.83	2.79*	0.38
PAREDUC	3.78	0.50	3.87	0.53	5.63*	0.77
PAROCC	62.94	8.12	64.05	8.30	3.66*	0.50
OCDESIRE	68.21	5.21	69.85	5.02	4.91*	0.67
OCEXPECT	63.41	6.74	65.63	6.38	6.12*	0.84
PCTGIRLS	51.51	3.67	51.25	3.20	-0.42	0.06
RESIDE	2.23	1.54	2.24	1.51	0.16	0.02
PCTWHITE	89.97	14.97	90.01	15.79	0.09	0.01
LIBRARY	1.98	0.41	1.92	0.29	-1.38	0.19
STABLE	3.75	0.10	3.77	0.08	1.31	0.18
FAMSIZE	3.02	0.36	2.86	0.38	-6.50*	0.89
FAMORDER	1.02	0.08	1.01	0.10	-0.75	0.10
SPARINT	5.15	0.44	5.34	0.46	3.27*	0.45
HOMEWORK	1.72	0.21	1.80	0.21	3.75*	0.52
TVWATCH	1.51	0.25	1.41	0.24	-4.86*	0.67
PAREXP	4.92	0.42	5.04	0.43	5.45*	0.75
EDEXPECT	2.23	0.31	2.32	0.30	6.86*	0.94
STEACHEX	1.68	0.09	1.73	0.10	3.20*	0.44
HOMEREAD	11.91	0.45	11.72	0.43	-6.62*	0.91
HOMECLIM	23.36	0.80	23.52	0.79	1.27	0.17

[a]Difference for knowledge of Human Accomplishments due to scoring change.

*Denotes significance beyond .01 level determined by dependent t test.

Table 14

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 5
All Schools (n=160)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	61.05	3.14	61.50	3.36	1.38	0.11
Und Othr	118.48	7.33	119.57	7.97	1.60	0.13
Reading	26.94	2.86	27.76	3.38	2.89*	0.23
Writing	28.41	2.45	29.15	2.71	3.59*	0.28
Math	36.51	3.29	37.05	3.56	1.93	0.15
Int Schl	54.72	3.21	54.15	3.69	-1.57	0.12
Soc Resp	43.27	2.35	43.36	2.74	0.32	0.03
K Law/Gov	10.58	1.25	11.35	1.41	6.94*	0.55
Health	29.58	1.90	30.34	2.12	4.04*	0.32
Creat Act	52.54	5.56	53.48	5.63	1.96	0.16
Career Awar	24.41	2.11	24.85	2.09	2.45	0.19
Ap Hum Acc	146.98	10.14	148.42	10.60	1.39	0.11
K Hum Acc	21.04	2.88	21.39	2.81	1.73	0.14
Info Usage	18.30	2.12	18.92	2.22	3.12*	0.25
GRENROLL	65.85	40.48	67.59	40.90	1.39	0.11
PCTTITL	22.46	11.16	23.85	11.73	3.70*	0.29
TUITION	1067.54	159.13	1289.02	185.93	44.74*	3.54
TLOCALE	1.50	0.27	1.50	0.29	-0.11	0.01
TSATPAR	2.22	0.28	2.21	0.33	-0.41	0.03
TEDUC	1.47	0.20	1.53	0.22	4.84*	0.38
TEXPER	10.86	2.43	11.93	2.52	8.09*	0.64
CLSIZE	24.70	2.26	24.04	2.44	-4.03*	0.32
READTIME	5.61	1.28	5.70	1.27	0.82	0.07
MATHTIME	4.14	0.56	4.15	0.61	0.16	0.01
EXTRACT	11.48	1.16	11.73	1.24	2.82*	0.22
TRELATE	18.47	2.56	18.90	2.81	2.56*	0.20
DISRUPT	19.75	1.32	19.89	1.40	1.39	0.11
INFLUENC	19.57	2.72	20.48	2.41	5.07*	0.40
TSTAFF	7.91	0.78	7.98	0.77	1.23	0.10
DISCPROB	10.68	1.67	10.82	1.77	1.14	0.09
PAREDUC	3.43	0.43	3.55	0.48	5.22*	0.41
PAROCC	52.56	9.63	52.39	10.61	-0.31	0.02
PCTGIRLS	48.56	7.14	48.98	7.41	0.53	0.04
RESIDE	1.12	1.28	1.06	1.27	-1.15	0.09
PCTWHITE	97.15	4.09	97.24	4.18	0.37	0.03
LIBRARY	1.70	0.65	1.64	0.62	-1.28	0.10
STABLE	3.64	0.18	3.67	0.13	2.08	0.16
FAMSIZE	2.39	0.40	2.19	0.33	-6.90*	0.55
FAMORDER	1.12	0.14	1.17	0.12	4.14*	0.33
SPARINT	6.11	0.51	6.20	0.48	1.96	0.16
HOMEWORK	1.90	0.30	1.98	0.25	3.31*	0.26
TVWATCH	2.45	0.31	2.37	0.35	-2.95*	0.23
HOMEREAD	10.85	0.75	10.85	0.75	0.03	0.00
HOMECLIM	25.22	1.25	25.12	1.31	-0.74	0.06

*Denotes significance beyond .01 level determined by dependent t test.

Table 15

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 5
Small Grade Enrollment: Up to 60 (n=91)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	60.70	3.62	61.11	3.50	0.82	0.09
Und Othr	118.22	8.26	119.12	8.71	0.87	0.09
Reading	26.49	3.04	27.68	3.72	2.62*	0.27
Writing	28.04	2.57	29.06	2.80	3.19*	0.33
Math	36.37	3.45	37.04	3.61	1.57	0.16
Int Schl	54.76	3.66	53.65	4.17	-1.98	0.21
Soc Resp	43.22	2.79	43.44	2.99	0.58*	0.06
K Law/Gov	10.31	1.37	11.31	1.52	5.77*	0.60
Health	29.37	2.10	30.35	2.43	3.30*	0.35
Creat Act	52.79	5.92	54.53	6.00	2.45	0.26
Career Awar	24.12	2.36	24.62	2.28	1.77	0.19
Ap Hum Acc	147.14	12.09	147.78	12.54	0.40	0.04
K Hum Acc	20.64	3.06	21.16	2.72	1.72	0.18
Info Usage	17.86	2.26	18.68	2.34	2.57	0.27
GRENROLL	40.76	13.04	42.86	16.53	1.74	0.18
PCTTITLI	24.01	11.05	24.88	11.56	1.66	0.17
TUITION	1062.60	136.54	1283.30	154.63	38.56*	4.04
TLOCALE	1.50	0.30	1.52	0.32	0.90	0.09
TSATPAR	2.24	0.31	2.22	0.36	-0.60	0.06
TEDUC	1.46	0.22	1.51	0.24	3.12*	0.33
TEXPER	10.85	2.44	11.65	2.48	4.16*	0.44
CLSIZE	24.19	2.58	23.39	2.65	-3.16*	0.33
READTIME	5.58	1.48	5.70	1.42	0.82	0.09
MATHTIME	4.09	0.63	4.06	0.69	-0.32	0.03
EXTRACT	11.59	1.31	11.77	1.31	1.51	0.16
TRELATE	18.65	2.59	19.12	3.00	1.87	0.20
DISRUPT	19.83	1.43	20.00	1.59	1.16	0.12
INFLUENC	19.37	3.16	20.47	2.66	4.56*	0.48
TSTAFF	8.05	0.81	8.13	0.73	1.18	0.12
DISCPROB	10.73	1.86	11.00	1.86	1.60	0.17
PAREDUC	3.38	0.44	3.53	0.48	4.11*	0.43
PAROCC	50.88	8.69	50.80	10.22	-0.11	0.01
PCTGIRLS	47.86	8.32	49.47	8.31	1.34	0.14
RESIDE	0.82	1.10	0.75	0.98	-1.21	0.13
PCTWHITE	97.24	4.16	97.41	3.91	0.46	0.05
LIBRARY	1.67	0.68	1.58	0.64	-1.31	0.14
STABLE	3.65	0.19	3.68	0.14	1.72	0.18
FAMSIZE	2.42	0.42	2.22	0.35	-4.56*	0.48
FAMORDER	1.11	0.16	1.16	0.14	2.67*	0.28
SPARINT	6.06	0.58	6.16	0.53	1.38	0.14
HOMEWORK	1.89	0.35	1.98	0.28	2.38	0.25
TVWATCH	2.46	0.30	2.41	0.35	-1.54	0.16
HOMEREAD	10.75	0.79	10.81	0.82	0.64	0.07
HOMECLIM	25.20	1.46	24.97	1.44	-1.21	0.13

*Denotes significance beyond .01 level determined by dependent t test.

Table 16

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 5
Large Grade Enrollment: 61+ (n=69)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	61.52	2.28	62.01	3.09	1.43	0.17
Und Othr	118.82	5.97	120.17	6.92	1.66	0.20
Reading	27.55	2.50	27.88	2.91	1.26	0.15
Writing	28.91	2.22	29.29	2.61	1.70	0.21
Math	36.71	3.08	37.07	3.52	1.15	0.14
Int Schl	54.68	2.51	54.81	2.83	0.30	0.04
Soc Resp	43.35	1.61	43.26	2.37	-0.30	0.04
K Law/Gov	10.94	0.97	11.42	1.25	4.24*	0.51
Health	29.86	1.57	30.33	1.63	2.51*	0.30
Creat Act	52.21	5.07	52.10	4.81	-0.18	0.02
Career Awar	24.81	1.67	25.16	1.79	2.00	0.24
Ap Hum Acc	146.79	6.88	149.28	7.34	2.15	0.26
K Hum Acc	21.58	2.56	21.69	2.91	0.49	0.06
Info Usage	18.88	1.80	19.25	2.04	1.91	0.23
GRENROLL	98.96	40.66	100.22	40.62	0.52	0.06
PCTTITLI	20.41	11.06	22.52	11.92	3.90*	0.47
TUITION	1074.06	185.64	1296.58	221.56	25.57*	3.08
TLOCALE	1.51	0.24	1.48	0.26	-1.68	0.20
TSATPAR	2.20	0.26	2.20	0.28	0.32	0.04
TEDUC	1.50	0.18	1.56	0.19	3.93*	0.47
TEXPER	10.88	2.45	12.31	2.55	8.72*	1.05
CLSIZE	25.38	1.53	24.90	1.83	-2.63*	0.32
READTIME	5.66	0.96	5.70	1.07	0.25	0.03
MATHTIME	4.22	0.47	4.27	0.48	0.80	0.10
EXTRACT	11.37	0.92	11.69	1.17	2.75*	0.33
TRELATE	18.24	2.52	18.62	2.53	1.83	0.22
DISRUPT	19.64	1.17	19.75	1.10	0.78	0.09
INFLUENC	19.85	2.00	20.51	2.07	2.47	0.30
TSTAFF	7.74	0.73	7.79	0.80	0.54	0.06
DISCPROB	10.63	1.40	10.59	1.65	-0.27	0.03
PAREDUC	3.50	0.42	3.59	0.48	3.38*	0.41
PAROCC	54.78	10.41	54.51	10.83	-0.40	0.05
PCTGIRLS	49.50	5.12	48.36	6.04	-1.28	0.15
RESIDE	1.53	1.41	1.48	1.50	-0.49	0.06
PCTWHITE	97.04	4.04	97.03	4.55	-0.02	0.00
LIBRARY	1.74	0.60	1.72	0.59	-0.38	0.05
STABLE	3.65	0.17	3.67	0.12	1.17	0.14
FAMSIZE	2.36	0.38	2.16	0.32	-6.02*	0.72
FAMORDER	1.14	0.12	1.19	0.10	4.05*	0.49
SPARINT	6.17	0.41	6.26	0.40	1.53	0.18
HOMEWORK	1.92	0.22	1.99	0.21	2.56*	0.31
TVWATCH	2.43	0.38	2.33	0.36	-2.86*	0.34
HOMEREAD	10.98	0.68	10.91	0.65	-1.31	0.16
HOMECLIM	25.24	0.93	25.32	1.06	0.52	0.06

*Denotes significance beyond .01 level determined by dependent t test.

Table 17

Changes in Scores for Schools Involved in 1979 and 1981 Assessments: Grade 8 All Schools (n=73)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.02	2.52	57.49	2.33	1.37	0.16
Und Othr	111.69	5.42	112.27	5.19	0.93	0.11
Reading	26.72	2.80	27.44	2.20	2.20	0.26
Writing	35.89	2.60	36.94	2.04	3.53*	0.41
Math	31.42	2.55	32.24	2.71	3.06*	0.36
Int Schl	65.98	5.55	66.94	4.91	1.53	0.18
Soc Resp	61.30	3.72	62.36	3.29	3.13*	0.37
K Law/Gov	24.64	2.64	25.55	2.21	3.49*	0.41
Health	87.39	3.90	87.55	3.89	0.30	0.04
Creat Act	45.08	4.89	44.00	3.67	-1.88	0.22
Career Awar	22.85	1.48	23.65	1.41	4.36*	0.51
Ap Hum Acc	130.22	8.86	128.52	6.95	-1.84	0.22
K Hum Acc	28.85	3.09	29.31	2.20	1.68	0.20
Info Usage	14.82	1.46	15.29	1.13	2.80*	0.33
GRENROLL	172.78	84.73	161.11	78.73	-5.15*	0.60
PCTTITLI	21.29	9.82	23.31	10.35	2.95*	0.35
TUITION	1220.57	160.46	1481.65	184.26	26.65*	3.12
TLOCALE	1.41	0.26	1.42	0.26	0.48	0.06
TSATPAR	1.86	0.22	1.88	0.24	0.55	0.07
TEDUC	1.60	0.20	1.64	0.18	2.75*	0.32
TEXPER	12.04	2.00	12.73	1.99	3.97*	0.46
CLSIZE	25.34	2.60	24.21	2.40	-6.06*	0.71
EXTRACT	10.51	1.01	10.57	1.24	0.57	0.07
TRELATE	13.84	2.03	14.41	2.37	2.50*	0.29
DISRUPT	18.61	1.23	18.53	1.34	-0.58	0.07
INFLUENC	18.53	2.28	19.02	2.11	1.99	0.23
TSTAFF	7.18	0.63	7.21	0.76	0.27	0.03
DISCPROB	9.02	1.64	9.53	1.68	2.39	0.28
PAREDUC	3.35	0.33	3.42	0.31	4.29*	0.50
PAROCC	54.07	6.67	54.51	6.90	1.14	0.13
PCTGIRLS	48.17	4.45	49.32	3.90	1.83	0.22
RESIDE	1.05	1.02	1.10	1.22	0.76	0.09
PCTWHITE	96.87	2.54	96.98	3.26	0.37	0.04
LIBRARY	1.88	0.37	1.84	0.37	-1.06	0.12
STABLE	3.71	0.09	3.75	0.09	2.78*	0.33
FAMSIZE	2.88	0.32	2.61	0.35	-9.18*	1.08
FAMORDER	1.01	0.09	1.10	0.08	8.24*	0.96
SPARINT	5.10	0.52	5.31	0.45	4.03*	0.47
HOMEWORK	1.72	0.21	1.76	0.20	1.68	0.20
TVWATCH	2.29	0.24	2.25	0.22	-1.74	0.20
PAREXP	4.55	0.37	4.64	0.33	3.53*	0.41
EDEXPECT	1.99	0.27	2.07	0.27	4.17*	0.49
STEACHEX	1.65	0.11	1.65	0.11	-0.05	0.01
HOMEREAD	11.33	0.50	11.30	0.49	-0.54	0.06
HOMECLIM	23.67	0.99	23.92	1.03	1.92	0.22

*Denotes significance beyond .01 level determined by dependent t test.

Table 18

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 8
Small Grade Enrollment: Up to 200 (n=50)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	56.76	2.65	57.38	2.38	1.74	0.25
Und Othr	111.55	5.87	112.17	5.75	0.73	0.10
Reading	26.45	3.06	27.35	2.41	2.04	0.29
Writing	35.50	2.78	36.68	2.21	2.84*	0.40
Math	31.36	2.47	32.22	2.86	2.41	0.34
Int Schl	65.49	5.49	67.20	4.87	2.10	0.30
Soc Resp	61.88	3.77	62.96	2.96	2.55*	0.36
K Law/Gov	24.45	2.87	25.30	2.25	2.57*	0.36
Health	87.58	4.18	88.10	3.92	0.74	0.11
Creat Act	44.65	5.19	43.22	3.76	-1.98	0.28
Career Awar	22.66	1.48	23.62	1.51	3.74*	0.53
Ap Hum Acc	131.60	9.63	129.66	6.96	-1.58	0.22
K Hum Acc	28.41	3.27	29.16	2.36	2.04	0.29
Info Usage	14.71	1.57	15.22	1.26	2.31	0.33
GRENROLL	124.98	46.70	116.02	38.91	-3.98*	0.56
PCTTITLI	21.83	8.92	24.27	9.18	2.94*	0.42
TUITION	1193.44	139.41	1451.38	167.06	21.36*	3.02
TLOCALE	1.42	0.29	1.43	0.28	0.74	0.11
TSATPAR	1.86	0.21	1.84	0.22	-0.66	0.09
TEDUC	1.57	0.19	1.62	0.17	2.74*	0.39
TEXPER	12.14	2.17	12.74	2.18	2.81*	0.40
CLSIZE	24.87	2.71	23.68	2.38	-5.31*	0.75
EXTRACT	10.35	1.05	10.43	1.32	0.58	0.08
TRELATE	13.68	1.88	14.12	2.33	1.53	0.22
DISRUPT	18.50	1.23	18.36	1.37	-0.86	0.12
INFLUENC	18.53	2.27	18.92	1.99	1.34	0.19
TSTAFF	7.16	0.69	7.19	0.83	0.24	0.03
DISCPROB	9.08	1.65	9.56	1.75	1.77	0.25
PAREDUC	3.27	0.24	3.36	0.21	3.53*	0.50
PAROCC	52.33	5.25	52.78	5.34	0.88	0.13
PCTGIRLS	48.26	5.10	49.19	4.33	1.09	0.15
RESIDE	0.65	0.39	0.68	0.68	0.44	0.06
PCTWHITE	97.31	2.03	97.87	2.13	1.52	0.22
LIBRARY	1.90	0.39	1.85	0.39	-0.90	0.13
STABLE	3.73	0.09	3.77	0.10	2.21	0.31
FAMSIZE	2.97	0.32	2.69	0.39	-6.88*	0.97
FAMORDER	0.98	0.10	1.09	0.09	6.95*	0.98
SPARINT	5.06	0.56	5.31	0.47	3.78*	0.54
HOMEWORK	1.70	0.23	1.77	0.20	1.90	0.27
TVWATCH	2.32	0.25	2.31	0.21	-0.54	0.08
PAREXP	4.47	0.34	4.59	0.32	3.47*	0.49
EDEXPECT	1.93	0.25	2.03	0.27	3.97*	0.56
STEACHEX	1.65	0.11	1.64	0.12	-0.41	0.06
HOMEREAD	11.19	0.46	11.21	0.43	0.27	0.04
HOMECLIM	23.64	1.13	24.01	1.07	2.20	0.31

*Denotes significance beyond .01 level determined by dependent t test

Table 19

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 8
Large Grade Enrollment: 200+ (n=23)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.58	2.16	57.34	2.27	-0.58	0.12
Und Othr	111.99	4.33	112.48	4.06	0.63	0.13
Reading	27.31	2.04	27.64	1.70	0.83	0.17
Writing	36.74	1.97	37.50	1.53	2.80*	0.58
Math	31.55	2.76	32.26	2.43	2.05	0.43
Int Schl	67.06	5.64	66.36	5.04	-0.88	0.18
Soc Resp	60.05	3.33	61.06	3.65	1.79	0.37
K Law/Gov	25.05	2.03	26.07	2.06	2.52	0.53
Health	86.97	3.21	86.35	3.60	-0.88	0.18
Creat Act	46.00	4.15	45.71	2.87	-0.32	0.07
Career Awar	23.25	1.41	23.74	1.17	2.64	0.55
Ap Hum Acc	127.23	6.04	126.03	6.38	-0.95	0.20
K Hum Acc	29.81	2.45	29.63	1.82	-0.67	0.14
Info Usage	15.06	1.19	15.42	0.76	1.65	0.34
GRENROLL	276.69	46.45	259.13	47.44	-3.41*	0.71
PCTTITLI	20.11	11.68	21.21	12.52	0.91	0.19
TUITION	1279.56	188.86	1547.47	205.78	15.81*	3.30
TLOCALE	1.39	0.20	1.38	0.22	-0.36	0.08
TSATPAR	1.86	0.26	1.96	0.26	1.88	0.39
TEDUC	1.65	0.22	1.67	0.21	0.75	0.16
TEXPER	11.81	1.60	12.71	1.54	2.93*	0.61
CLSIZE	26.35	2.05	25.34	2.05	-2.92*	0.61
EXTRACT	10.85	0.82	10.87	1.03	0.13	0.03
TRELATE	14.20	2.30	15.04	2.39	2.41	0.50
DISRUPT	18.85	1.23	18.92	1.22	0.34	0.07
INFLUENC	18.52	2.36	19.26	2.38	1.49	0.31
TSTAFF	7.24	0.51	7.25	0.59	0.12	0.03
DISCPROB	8.89	1.63	9.46	1.55	1.68	0.35
PAREDUC	3.52	0.42	3.58	0.44	2.54	0.53
PAROCC	57.85	7.91	58.27	8.40	0.76	0.16
PCTGIRLS	47.98	2.62	49.61	2.82	2.21	0.46
RESIDE	1.91	1.40	2.00	1.61	0.65	0.14
PCTWHITE	95.90	3.22	95.04	4.33	-2.04	0.43
LIBRARY	1.84	0.32	1.81	0.34	-0.55	0.12
STABLE	3.67	0.09	3.70	0.06	1.80	0.38
FAMSIZE	2.70	0.22	2.45	0.18	-7.76*	1.62
FAMORDER	1.05	0.05	1.13	0.07	4.63*	0.97
SPARINT	5.20	0.41	5.29	0.39	1.48	0.31
HOMEWORK	1.75	0.17	1.76	0.22	0.20	0.04
TVWATCH	2.23	0.23	2.14	0.21	-2.89*	0.60
PAREXP	4.71	0.37	4.76	0.34	1.08*	0.23
EDEXPECT	2.12	0.28	2.16	0.27	1.45	0.30
STEACHEX	1.66	0.10	1.68	0.07	0.76	0.16
HOMEREAD	11.65	0.46	11.51	0.55	-2.08	0.44
HOMECLIM	23.73	0.58	23.72	0.89	-0.10	0.02

*Denotes significance beyond .01 level determined by dependent t test.

Table 20

Changes in Scores for Schools Involved in 1979 and 1981 Assessments: Grade 11 All Schools (n=66)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.45	1.79	57.83	2.24	1.26	0.16
Und Othr	113.56	4.18	112.91	4.95	-0.91	0.11
Reading	25.64	2.25	24.90	2.43	-2.18	0.27
Writing	34.59	1.79	34.15	2.19	-1.72	0.21
Math	35.37	2.15	34.78	2.53	-2.12	0.26
Int Schl	61.35	4.35	62.36	3.85	1.66	0.20
Soc Resp	50.95	2.13	50.41	2.25	-1.77	0.22
K Law/Gov	24.07	1.93	24.17	1.89	0.36	0.04
Health	81.01	3.60	80.46	4.02	-1.05	0.13
Creat Act	39.88	4.32	40.46	3.88	1.17	0.14
Career Awar	22.53	1.40	22.52	1.52	-0.04	0.01
Ap Hum Acc	126.83	8.29	125.46	7.12	-1.32	0.16
K Hum Acc	26.21	2.91	26.09	2.87	-0.35	0.04
Info Usage	17.91	1.32	18.03	1.59	0.52	0.06
GRENROLL	183.26	113.61	177.32	104.18	-1.97	0.24
PCTTITLI	18.44	9.94	21.12	10.68	3.90*	0.48
TUITION	1217.73	158.11	1480.42	182.03	26.03*	3.20
TLOCALE	1.37	0.29	1.38	0.29	0.36	0.04
TSATPAR	1.85	0.20	1.83	0.24	-0.83	0.10
TEDUC	1.65	0.20	1.68	0.20	2.46	0.30
TEXPER	12.86	1.94	13.68	1.99	5.66*	0.70
CLSIZE	24.22	2.07	23.51	2.02	-3.97*	0.49
EXTRACT	10.48	1.02	10.60	1.07	1.11	0.14
TRELATE	13.61	1.78	13.86	2.02	1.25	0.15
DISRUPT	18.06	1.26	17.86	1.32	-1.50	0.19
INFLUENC	19.20	1.82	19.30	1.80	0.45	0.06
TSTAFF	7.07	0.62	7.05	0.69	-0.30	0.04
DISCPROB	9.13	1.36	9.38	1.60	1.30	0.16
PAREDUC	3.40	0.29	3.45	0.30	2.89*	0.36
PAROCC	54.66	7.18	55.37	6.92	1.52	0.19
OCDESIRE	64.28	4.36	65.23	4.10	2.12	0.26
OCEXPECT	58.36	5.03	59.72	5.57	3.04	0.37
PCTGIRLS	50.28	5.16	50.90	4.96	0.82	0.10
RESIDE	1.02	0.82	1.15	1.01	2.32	0.28
PCTWHITE	96.83	2.26	96.47	2.96	-1.04	0.13
LIBRARY	2.01	0.35	1.99	0.34	-0.84	0.10
STABLE	3.84	0.07	3.82	0.09	-1.45	0.18
FAMSIZE	3.01	0.34	2.93	0.39	-2.36	0.29
FAMORDER	1.01	0.09	1.03	0.09	1.96	0.24
SPARINT	5.00	0.46	5.12	0.41	1.88	0.23
HOMEWORK	1.58	0.25	1.63	0.25	1.61	0.20
TVWATCH	1.55	0.29	1.54	0.21	-0.22	0.03
PAREXP	4.61	0.30	4.68	0.30	2.89*	0.36
EDEXPECT	1.99	0.21	2.06	0.23	4.74*	0.58
STEACHEX	1.64	0.12	1.66	0.11	1.58	0.19
HOMEREAD	11.62	0.47	11.49	0.46	-2.23	0.28
HOMECLIM	23.44	0.84	23.50	0.96	0.40	0.05

*Denotes significance beyond .01 level determined by dependent t test.

Table 21

Changes in Scores for Schools Involved in
1979 and 1981 Assessments: Grade 11
Small Grade Enrollment: Up to 200 (n=43)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.29	1.91	57.35	2.37	0.14	0.02
Und Othr	112.85	4.23	112.76	5.43	-0.09	0.01
Reading	25.62	2.45	24.70	2.42	-2.16	0.33
Writing	34.34	1.89	33.82	2.24	-1.52	0.23
Math	35.11	2.33	34.27	2.64	-2.18	0.33
Int Schl	61.29	4.60	61.86	3.87	0.69	0.11
Soc Resp	50.99	2.11	50.64	2.36	-0.89	0.14
K Law/Gov	23.62	2.03	23.74	1.79	0.31	0.05
Health	81.29	3.29	80.74	4.22	-0.78	0.12
Creat Act	38.91	4.39	40.28	4.06	2.15	0.33
Career Awar	22.26	1.59	22.17	1.59	-0.33	0.05
Ap Hum Acc	126.83	9.11	125.92	7.28	-0.66	0.10
K Hum Acc	25.34	2.83	25.29	2.89	-0.10	0.02
Info Usage	17.73	1.34	17.94	1.63	0.63	0.10
GRENROLL	117.18	47.59	115.88	48.88	-0.47	0.07
PCTTITLI	20.54	9.69	23.10	10.30	2.99*	0.46
TUITION	1193.27	142.31	1458.07	176.58	20.44*	3.12
TLOCALE	1.36	0.30	1.36	0.30	0.01	0.00
TSATPAR	1.85	0.19	1.81	0.26	-1.24	0.19
TEDUC	1.59	0.16	1.63	0.16	2.40	0.37
TEXPER	12.68	2.01	13.28	2.01	3.44*	0.53
CLSIZE	23.90	2.27	23.18	2.26	-2.89*	0.44
EXTRACT	10.39	0.99	10.48	1.07	0.66	0.10
TRELATE	13.44	1.63	13.65	2.21	0.82	0.13
DISRUPT	18.29	1.28	18.12	1.35	-0.99	0.15
INFLUENC	19.06	2.00	19.18	1.84	0.40	0.06
TSTAFF	7.14	0.60	7.13	0.70	-0.09	0.01
DISCPROB	9.24	1.41	9.38	1.75	0.53	0.08
PAREDUC	3.31	0.19	3.36	0.22	1.75	0.27
PAROCC	52.11	5.69	52.68	5.65	0.84	0.13
OCDESIRE	62.89	4.37	64.05	3.82	1.79	0.27
OCEXPECT	56.51	4.44	57.93	5.25	2.26	0.35
PCTGIRLS	49.46	5.34	51.37	5.65	1.90	0.29
RESIDE	0.65	0.32	0.78	0.67	1.84	0.28
PCTWHITE	97.24	1.98	96.89	2.59	-0.72	0.11
LIBRARY	2.08	0.36	2.04	0.36	-0.93	0.14
STABLE	3.85	0.06	3.82	0.09	-1.67	0.26
FAMSIZE	3.15	0.33	3.07	0.39	-1.46	0.22
FAMORDER	0.97	0.08	1.01	0.09	2.13	0.33
SPARINT	5.00	0.53	5.08	0.45	0.99	0.15
HOMEWORK	1.53	0.24	1.59	0.25	1.50	0.23
TVWATCH	1.65	0.29	1.60	0.20	-0.95	0.15
PAREXP	4.51	0.27	4.61	0.29	2.60*	0.40
EDEXPECT	1.91	0.19	2.00	0.19	4.00*	0.61
STEACHEX	1.61	0.13	1.65	0.13	1.52	0.23
HOMEREAD	11.48	0.46	11.40	0.44	-0.95	0.15
HOMECLIM	23.47	0.95	23.53	1.06	0.25	0.04

*Denotes significance beyond .01 level determined by dependent t test.

Table 22

Changes in Scores for Schools Involved in 1979 and 1981 Assessments: Grade 11 Large Grade Enrollments 200+ (n=23)

	1979		1981			
	Mean	SD	Mean	SD	t	d
Self Estm	57.74	1.54	58.70	1.70	2.99*	0.62
Und Othr	114.89	3.74	113.19	3.96	-1.55	0.32
Reading	25.66	1.84	25.27	2.44	-0.70	0.15
Writing	35.03	1.51	34.76	1.97	-0.77	0.16
Math	35.83	1.68	35.71	2.03	-0.35	0.07
Int Schl	61.45	3.94	63.28	3.69	2.16	0.45
Soc Resp	50.86	2.21	49.98	2.01	-1.87	0.39
K Law/Gov	24.89	1.40	24.96	1.84	0.17	0.04
Health	80.48	4.12	79.94	3.61	-0.73	0.15
Creat Act	41.69	3.60	40.79	3.55	-1.32	0.28
Career Awar	23.01	0.74	23.15	1.13	0.68	0.14
Ap Hum Acc	126.82	6.62	124.59	6.83	-1.43	0.30
K Hum Acc	27.83	2.31	27.58	2.19	-0.64	0.13
Info Usage	18.21	1.24	18.18	1.52	-0.10	0.02
GRENROLL	306.78	96.57	292.17	79.61	-2.17	0.45
PCTTITLI	14.50	9.36	17.40	10.57	2.46	0.51
TUITION	1263.43	178.46	1522.21	188.59	15.95*	3.33
TLOCALE	1.38	0.26	1.39	0.26	0.86	0.18
TSATPAR	1.86	0.20	1.87	0.19	0.33	0.07
TEDUC	1.75	0.22	1.77	0.22	0.77	0.16
TEXPER	13.18	1.80	14.41	1.76	5.13*	1.07
CLSIZE	24.81	1.50	24.15	1.27	-3.25*	0.68
EXTRACT	10.65	1.06	10.81	1.04	1.09	0.23
TRELATE	13.92	2.02	14.25	1.58	1.00	0.21
DISRUPT	17.62	1.06	17.37	1.13	-1.22	0.26
INFLUENC	19.45	1.40	19.50	1.75	0.18	0.04
TSTAFF	6.92	0.61	6.87	0.64	-0.53	0.11
DISCPROB	8.91	1.24	9.36	1.32	1.97	0.41
PAREDUC	3.55	0.36	3.62	0.34	2.70*	0.56
PAROCC	59.40	7.36	60.37	6.33	2.17	0.45
OCDESIRE	66.85	2.99	67.41	3.74	1.23	0.26
OCEXPECT	61.80	4.24	63.06	4.57	2.30	0.48
PCTGIRLS	51.81	4.49	49.99	3.19	-2.17	0.45
RESIDE	1.70	1.01	1.82	1.19	1.39	0.29
PCTWHITE	96.07	2.50	95.68	3.42	-0.91	0.19
LIBRARY	1.87	0.29	1.87	0.26	-0.04	0.01
STABLE	3.80	0.07	3.80	0.07	0.08	0.02
FAMSIZE	2.75	0.15	2.66	0.15	-3.68*	0.77
FAMORDER	1.06	0.06	1.06	0.06	0.14	0.03
SPARINT	5.01	0.30	5.18	0.32	2.25	0.47
HOMEWORK	1.66	0.24	1.69	0.22	0.61	0.13
TVWATCH	1.35	0.15	1.42	0.17	1.51	0.32
PAREXP	4.78	0.27	4.82	0.28	1.32	0.28
EDEXPECT	2.12	0.18	2.18	0.22	2.51	0.52
STEACHEX	1.67	0.07	1.67	0.06	0.42	0.09
HOMEREAD	11.85	0.38	11.63	0.44	-3.82*	0.80
HOMECLIM	23.38	0.60	23.45	0.76	0.41	0.09

*Denotes significance beyond .01 level determined by dependent t test.